

REMARKS

The rejection of claims 1-9 as unpatentable under 35 U.S.C. 102(b) as anticipated by Goldhor et al. (US 5,231,670) is respectfully traversed.

Goldhor et al. may be directed to similar subject matter as the present invention. However, it is not directed to the same problems as the present invention, and does not disclose any solution which anticipates the present invention.

It should be noted that the present invention is not primarily concerned with speech dictation or "speech to text" recognition systems wherein the spoken terms are recognized for word processing purposes. Rather, the present invention is directed to speech or voice recognition of spoken commands used to control systems for a wide variety of purposes including control commands which could be used for the control of speech recognition word processing systems. Applicants make this distinction because the Goldhor system deals with both command recognition and spoken text recognition. However, Goldhor et al. deal with command recognition and processing in a manner quite different from Applicants' processing of commands. As will be hereinafter shown, the Examiner in applying Goldhor's disclosure does not distinguish Goldhor's processing of commands from Goldhor's processing of spoken text and seems to be indiscriminately combining elements from Goldhor's command processing with Goldhor's spoken text processing in the attempt to anticipate Applicants' invention.

The present invention is directed to command control technology, wherein, for example, a user may navigate through a computer system's graphical user interface (GUI) by the user speaking the commands which are customarily found in the systems' menu text, icons, labels, buttons,

etc.. Many deficiencies in speech recognition both in word processing and in command technologies result from inherent voice recognition errors due in part to the status of the technology and in part to the variability of user speech patterns and the user's ability to remember the specific commands necessary to initiate actions. In word processing, visual feedback which confirms input is inherent, since the purpose of the process is to translate from the spoken to the visual. However, in speech recognition driven command and control systems, the user must often refer to command menus to find appropriate commands for his purposes. Thus, there is a constant need for switching back and forth from a natural speech input mode of operation to command menus. To do this, the user must make a sequence of manual inputs through his mouse and/or keyboard. Such manual operations still get in the way of interactive users who, because of a lack of computer skills or other reasons, wish to relate to the computer system in a fully voice activated or conversational manner.

The present invention provides a solution for users of voice recognition systems who still need visual feedback in order to confirm the accuracy of spoken commands but need to operate in a "hands-off" mode with respect to computer input. In an interactive computer controlled display system with speech command input recognition, the present invention provides a system for confirming the recognition of a command by first predetermining a plurality of speech commands for respectively designating each of a corresponding plurality of system actions and providing means for detecting such speech commands. There also are means responsive to a detected speech command for displaying said command for a predetermined time period, during which time the user may give a spoken command to stop the system action designated by said displayed command. If the system action is not stopped during said predetermined time period,

the system action designated by the displayed command will be executed.

The disclosure of Goldhor et al. fails to anticipate the present invention in at least three significant elements:

- Goldhor et al. fails to disclose the display of commands.
- It does not disclose of a recognized command display for a predetermined time period.
- It does not disclose executing the action designated by displayed command if not stopped during time period.

Goldhor et al. is directed among other things to sorting spoken text to be processed from interspersed spoken control commands but it does not disclose displaying the recognized commands for any purpose.

The functioning of the Goldhor system is summarized in its Abstract:

".....enable the system and method to process both simple spoken words as well as commands and to provide the necessary text generation in response to the spoken words or execute an appropriate function in response to a command."

Please note that text is generated, i.e. displayed in response to spoken words but functions are executed in response to commands without any mention of any command display. This is the tenor of the entire Goldhor disclosure. Recognized text is displayed but recognized commands are only carried out but not displayed.

Furthermore, Goldhor et al. does not disclose displaying commands for any predetermined time period or executing the actions designated by the commands if not stopped during time period. In this connection, the Examiner has pointed to col. 5, lines 40-55 for this disclosure. When this section discusses displaying sets of candidates and best match candidates, it is discussing only

candidates for detected vocabulary words. Nowhere is there any discussion of displaying commands for any purpose.

Actually, in the whole related section, col 5, lines 17-55 referenced by the Examiner, Applicants can not find any reference to the display of anything for a predetermined period of time, let alone the execution of a command if such execution is not stopped during that period of time.

In view of the foregoing, claims 1-9, all of the claims in the present patent application are submitted to be in condition for allowance, such allowance is respectfully requested.

Respectfully submitted,



J. B. Kraft
Attorney for Applicants
Registration No. 19,226
(512) 302-1380

PLEASE MAIL ALL CORRESPONDENCE TO:

Leslie Van Leeuwen
IPLaw Dept. - IMAD 4054
IBM Corporation
11400 Burnet Road
Austin, Texas 78758